

REMARKS

Claims 2, 4, 10, 16, 17, 22-24, 30, and 33-55 are amended. Claims 1, 13, and 29 are canceled. Claims 2-8, 10-12, 14-17, 22-28 and 30-68 are in the application for consideration.

The specification is amended to correct a typographical error. Entry of the same is requested.

The undersigned appreciates the Examiner's indicated allowability of claims 26-28.

The remaining independent claims that are rejected in this application are claims 17 and 36. Claim 17 is rejected as being obvious over U.S. Patent No. 7,098,131 to Kang et al., and independent claim 36 stands rejected as being obvious over a combination of the '131 Kang et al. patent with U.S. Patent No. 7,067,420 to Choi et al. Applicant hereby reasserts that the '131 Kang et al. patent is not prior art for the reasons previously asserted. Applicant acknowledges that the Examiner is empowered under the present record to rely upon U.S. Patent Application Serial No. 10/196,814 as prior art, but not language appearing in U.S. Patent No. 7,098,131 that does not also appear in the '814 application.

Independent claim 17 has been amended to emphasize that the chemisorbing of the first species is void of plasma, and that such method comprises feeding both of the first precursor and the second precursor to the chamber in the absence of plasma during the chemisorbing. Such amendments are not seen to go to patentability, as such are believed to

have inherently been present in claim 17 as last-presented. Further and regardless, independent claim 17 inherently requires feeding the second precursor to the chamber and the first precursor to the chamber during the stated chemisorbing, and as well requires contact of the chemisorbed first species with the second precursor plasma. Thereby as a minimum, both first and second precursor flowing is required during the chemisorbing, and a contacting with the second precursor plasma thereafter. Neither the '131 Kang et al. patent (which is not prior art), nor the '814 Kang et al. application discloses or suggests flowing both first and second precursors during Applicant's claim-recited act of chemisorbing, followed by contacting with the second precursor plasma. Accordingly, Applicant's claim 17 recites something which is not encompassed nor suggested by the teachings of the Kang et al. reference, and accordingly claim 17 should be allowed. Action to that end is requested.

Independent claim 36 requires plasma power to be applied to the second precursor within the deposition chamber. Claim 36 also requires that plasma power be started prior to feeding the second precursor to the deposition chamber, continued while feeding the second precursor to the deposition chamber, and continued after stopping feeding of the second precursor to the deposition chamber. Under no conceivable stretch of the imagination do either Kang et al. or Choi et al. in any way remotely refer to or imply such combinational aspects of application of plasma power.

In response to Applicant's previously submitted argument, the Examiner asserts that the references are silent regarding duration of the plasma, and that accordingly it is the Examiner's position that the plasma would be continuous as there is no suggestion to not do so. However, there is absolutely no teaching, suggestion, or inference of starting power before feeding the second precursor to the deposition chamber, nor continuing application of plasma power to the deposition chamber after stopping feeding of the second precursor to the deposition chamber. Indeed, the only reasonable inference is that plasma power starts at commencement of feeding the second precursor (not before) and stops commensurate with stopping such feeding (not after). There is absolutely no inference of starting it before and continuing it after. The Examiner's inference of a reason to do so in the last office action is nothing more than hindsight reconstruction using Applicant's application as a road map for the alleged obviousness conclusion which the Examiner reaches.

The undersigned reasserts that *prima facie* obviousness has not been made out with respect to the rejection of Applicant's claim 36. Absent the Examiner citing one or more other prior art references which specifically alone or in combination teach application of power before and continuing application of power after ceasing a precursor feed in an ALD process, the Examiner's obviousness rejection is in error, and withdrawal thereof is requested.

Applicant's dependent claims should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art. Action to that end is requested.

This application is believed to be in immediate condition for allowance, and action to that end is requested.

Respectfully submitted,

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